

removable user interface **150** to electronic computing device **110**, electronic computing device **110** may determine that an external device is connected, and subsequently identify the external device as removable user interface **150**.

[0144] With reference to FIG. 2A, electronic computing device **110** may determine that removable user interface **150** is connected to electronic computing device **110** in an orientation where removable user interface **150** covers at least a part of digital display **118**. Electronic computing device **110** may then determine the locations where tactile feedback elements **156** are relative to digital display **118**. Electronic computing device **110** may then display icons (e.g., A, B, C, D, E, and F) on digital display **118** in locations corresponding to locations of tactile feedback elements **156**. In this fashion, the icons may be visible through tactile feedback elements **156**. A user may then touch a tactile feedback element corresponding to letter D. In response, electronic computing device **110** may then perform a functionality associated with the letter D.

[0145] With reference to FIG. 3A, electronic computing device **110** may determine that removable user interface **150** is connected to electronic computing device **110** in an orientation where removable user interface **150** does not cover any portion of digital display **118**. In this case, electronic computing device **110** does not necessarily change the information on digital display **118**, and may allow control of electronic computing device **110** via removable user interface **150**.

[0146] Various embodiments for removable user interfaces and electronic computing devices according to the present invention have been described. While these inventions have been described in the context of the above specific embodiments, many modifications and variations are possible. For example, in one embodiment and with reference to FIG. 1, digital display **118** may display information and/or receive user inputs. For example, digital display **118** may be a touch pad display operable to both display information and receive user inputs, and could be any suitable touch pad, such as a resistive touch pad, a capacitive touch pad, etc. The above description is therefore for illustrative purposes and is not intended to be limiting. Also, references to top or bottom, or front and back of the various structures described above are relative and are used interchangeably depending on the point of reference. Similarly, dimensions and sizes provided throughout the above description are for illustrative purposes only and the inventive concepts described herein can be applied to structures with different dimensions. Accordingly, the scope and breadth of the present invention should not be limited by the specific embodiments described above and should instead be determined by the following claims and their full extend of equivalents.

What is claimed is:

1. An apparatus adapted to be operatively coupled to an electronic device, the apparatus comprising:

- a body having an engagement end, a user interface area, and a bend located between the engagement end and the user interface area;
- a connector located at the engagement end, the connector adapted to couple to a corresponding connector on the electronic device;
- a user interface element carried by the body in the user interface area, the user interface element operable to perform at least one of: receiving a user input and displaying information; and

a plurality of conductive elements coupled between the user interface element and the connector for communicating electrical signals between the user interface element and the connector;

wherein the bend enables the user interface area to wrap around a portion of the electronic device when the connector is coupled to the corresponding connector on the electronic device.

2. The device of claim 1 wherein the user interface area of the body is transparent.

3. The device of claim 1 wherein the connector is a 30-pin connector, a USB connector, a firewire connector, an audio jack, a serial connector, a parallel connector, a monitor connector, or a magnetic connector.

4. The device of claim 1 wherein the connector includes: an upper surface; a lower surface arranged opposite the upper surface; contact electrodes arranged on the upper surface for establishing an electrical connection with the electronic computing device when the connector is coupled to the electronic computing device in a first orientation; and contact electrodes arranged on the lower surface for establishing an electrical connection with the electronic computing device when the connector is coupled to the electronic computing device in a second orientation.

5. The device of claim 1 further comprising a plurality of tactile feedback elements provided proximate to the user interface element for providing tactile feedback to a user.

6. The device of claim 5 wherein the tactile feedback elements include at least one protrusion or cutout.

7. The device of claim 5 wherein the tactile feedback elements are located on at least one surface of the body.

8. The device of claim 7 wherein the tactile feedback elements are located on opposite surfaces of the body.

9. The device of claim 1 wherein the user interface element is an electronic display.

10. The device of claim 9 wherein the electronic display is a light-emitting diode display, electroluminescent display, plasma display panel, liquid crystal display, thin-film transistor display, organic light-emitting display, swept-volume display, varifocal mirror display, emissive volume display, or holographic display.

11. The device of claim 1 wherein the user interface element is a touch pad operable to both display information and receive a user input.

12. The device of claim 1 wherein the bend includes at least one of a curved portion and a straight portion such that the bend is approximately 180 degrees.

13. The device of claim 1 wherein the bend includes at least one rotatable element for rotatably coupling the user interface element to the connector.

14. A removable clip for providing a removable user interface to a portable electronic computing device having a display surface and a rear surface arranged opposite the display surface, the clip comprising:

- a body including an interface portion and an engagement end, the interface portion including first and second surfaces opposing one another and having a plurality of touch-sensitive regions;
- a plurality of tactile feedback elements arranged on or formed by the first surface, each tactile feedback element being arranged over one of the plurality of touch-sensitive regions,